

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method of cardioscopy, comprising:
creating a primary heart bypass circuit for perfusing an organism;
creating a secondary circuit for perfusing the heart of the organism with a non-
observation-impairing pumping medium;
~~allowing the heart to continue beating;~~ and
observing the heart through the secondary circuit.
2. (Canceled)
3. (Original) The method of claim 1, wherein the pumping medium is oxygenatable.
4. (Original) The method of claim 1, wherein the organism is perfused with blood.
5. (Original) The method of claim 1, wherein creating the primary heart bypass circuit includes receiving blood from a vena cava and returning blood to the aorta.
6. (Original) The method of claim 1, wherein creating the primary heart bypass circuit includes perfusing a coronary blood vessel.
7. (Original) The method of claim 1, wherein the secondary circuit is fluidically isolated from the primary heart bypass circuit.
8. (Original) The method of claim 1, wherein creating the second circuit includes continuously perfusing the heart.
9. **(Currently amended)** The method of claim 1, wherein creating the secondary circuit includes perfusing ~~a chamber~~ chambers of the heart.
10. (Original) The method of claim 1, wherein creating the secondary circuit includes perfusing a coronary blood vessel.

11. (Original) The method of claim 1, wherein creating the secondary circuit includes receiving the pumping medium from the aorta and returning the pumping medium to a vena cava.
12. (Original) The method of claim 1, wherein the pumping medium is optically clear.
13. (Original) The method of claim 12, wherein the optically clear pumping medium is oxygenatable.
14. (Original) The method of claim 1, wherein the pumping medium is translucent.
15. (Original) The method of claim 1, wherein the pumping medium is non-turbid.
16. (Original) The method of claim 1, wherein the pumping medium includes a fluorocarbon.
17. (Original) The method of claim 16, wherein the fluorocarbon is perfluorocarbon.
18. (Original) The method of claim 1, wherein observing includes visualizing the heart through a catheter.
19. (Original) The method of claim 1, wherein observing includes visualizing with an angioscope.
20. (Original) The method of claim 1, wherein observing includes visualizing with an endoscope.
21. (Original) The method of claim 1, wherein observing includes observing a heart chamber.
22. (Original) The method of claim 1, wherein observing includes observing a heart valve.
23. (Original) The method of claim 1, further comprising performing an intracardiac procedure.

Claims 24-44 (Canceled)

45. (New) The method of claim 1, further comprising allowing the heart to continue beating.

46. **(New)** The method of claim 9, wherein the secondary circuit perfuses only the organism's right heart.
47. **(New)** The method of claim 9, wherein the secondary circuit perfuses only the organism's left heart.
48. **(New)** The method of claim 47, further comprising creating an additional secondary circuit for perfusing the heart of the organism with a non-observation-impairing pumping medium, wherein the additional secondary circuit perfuses only the organism's right heart.
49. **(New)** The method of claim 1, wherein flow through the secondary circuit is antegrade.
50. **(New)** The method of claim 1, wherein flow through the secondary circuit is retrograde.
51. **(New)** The method of claim 1, wherein the secondary circuit comprises a pump that pumps the pumping medium through the secondary circuit.
52. **(New)** The method of claim 1, wherein the secondary circuit comprises an oxygenator that oxygenates the pumping medium in the secondary circuit.
53. **(New)** The method of claim 1, wherein the pumping medium comprises a cardioplegia agent.
54. **(New)** The method of claim 1, wherein creating the secondary circuit includes receiving the pumping medium from the aorta and returning the pumping medium to the organism's right atrium.